## Chapter 4

# **Tactical-Level Considerations**

...difficulties are likely to arise unless higher commanders and staffs possess a knowledge, not only of the organization and staff methods of their allies, but also of the organization and general principles of the tactical employment of allied subordinate formations.

Notes from Theatres of War, London War Office October 1943

The principal focus of this manual is on multinational army operations at the operational level. However, it is worthwhile to examine the impact of multinational operations on tactical-level decision making as well. In the vertical linkage between the operational and tactical levels, the lines of distinction between levels are sometimes unclear. Commanders often find that while operating at their level they are simultaneously required to understand the higher intent and to plan two levels down. Therefore, commanders must understand tactical-level multinational matters. Tactical cooperation requires more precision since it deals with immediate combat actions. Among the disparities that adjacent and supporting commanders must reconcile are differences in tactical methods and operating procedures; differences in using other service capabilities, such as CA, varying organizations, and capabilities of units; and differences in equipment.

As they are at the operational level, tactical-level considerations are grouped into different functions. They include maneuver, intelligence, firepower, AD, CSS, C<sup>2</sup>, and mobility and survivability. The intent here is to examine them from a multinational perspective and consider how each might be uniquely affected when applied in a multinational tactical environment.

## **MANEUVER**

Tactical maneuver is characterized by the employment of forces on the battlefield through movement and direct fires in combination with fire support, or fire potential. This achieves a position of advantage over enemy ground forces to accomplish the mission. Tactical maneuver includes direct fire systems, such as small arms, tank guns, and attack helicopter fires, but it does not include indirect fires that are included under fire support.

The multinational commander must look at differing capabilities among partners when developing the maneuver portion of his plan. When operating under a lead nation concept with armies arrayed as national entities, imposing the lead nation's scheme for tactical maneuver on all participants would not suffice. Differences in TTP and disparity in equipment capabilities render such an approach unworkable. The use of liaison teams and an experienced staff to determine capabilities and differences of each partner cannot be overemphasized.

The multinational commander must familiarize himself with the capabilities and procedures of the armies under his command. This allows him to develop a maneuver plan that capitalizes on the strengths of each partner. Familiarity with the capabilities of all partners also enables the multinational commander to reach a sound decision as to the proper task organization. For instance, only one nation's army may have a strong attack helicopter capability, and this capability is the key to success. The multinational commander might establish command and support relationships that provide an effective attack helicopter capability throughout the MNF.

## **INTELLIGENCE**

Tactical intelligence is required to plan and conduct tactical operations. Intelligence-preparation-of-the-battlespace (IPB) is a continuous process that assesses the situation by evaluating the threat and describing the environment and its effects on the force. IPB provides a comprehensive projection of the situation for the decision maker and the synchronization of that information with the tactical commander's intent and plan. It is derived from an analysis of information of the enemy's capabilities, intentions, vulnerabilities, and the environment.

There is no single intelligence doctrine for multinational operations. Each coalition or alliance must develop its own procedures. Wherever possible, the multinational command and national forces' intelligence requirements, production, and use should be agreed upon, planned, exercised, tested, and replanned prior to operations. The best way for the J2 and his staff to prepare in this area is to anticipate what information and intelligence must be and may be exchanged and obtain required authorizations to enable these exchanges. Architecture and procedures appropriate to the equipment and liaison elements of the participating countries are then established. Collecting, disseminating, and sharing intelligence in the multinational tactical environment is difficult because each nation imposes its own operational and electronic protection measures on their forces. Often, these security measures preclude open sharing of information between partners and force the multinational commander to adopt measures ensuring that critical intelligence is accessible to all participants. This may involve requesting special dispensation from certain security restrictions. The senior US commander may modify any restrictions or procedures if they appear to jeopardize the mission or friendly forces. When intelligence cannot be shared among coalition nations, it should be provided after it is sanitized by effectively separating the information from the sources and collection methods.

In the multinational arena, indigenous populations provide a valuable source of tactical intelligence, particularly regarding terrain, weather, and information about local political relationships. This resource must be fully exploited where possible. The multinational commander must also tap the experience of multinational partners who have previous experience in the operating area. This is especially important if a nation's forces have a good working relationship with the local populace. Use of previously trained US personnel can also facilitate the use of HUMINT resources.

Regarding intelligence-gathering and dissemination systems, incompatibility of equipment is likely to be a problem for the multinational commander. If coalition and allied processing and communications systems are not compatible with US systems, commanders may choose to cross-level resources or establish special command and support relationships, such as use of intelligence support elements (ISEs). Liaison is often the key to obtaining vital information quickly.

Besides equipment incompatibility, internal staff structures and methods are often incompatible as well. For example, US staff cells typically surpass their counterparts in number, rank, and radio nets. Other national contingents sometimes perceive that US intelligence sections disseminate a great deal of unprocessed information, not intelligence.

A significant area of difference is in the US reliance on technical intelligence-gathering means to the detriment of other means. Other nations focus on and have more ground reconnaissance forces than a US force. This is an excellent way to cover gaps in US capabilities, such as the lack of scouts at the brigade level. Intelligence and operations officers must carefully research and employ all available assets across the MNF.

## **FIREPOWER**

Tactical firepower has two major functions:

- The collective and coordinated use of target acquisition data, indirect fire
  weapons, armed aircraft (less attack helicopters), and other lethal and
  nonlethal means against ground targets to support maneuver force
  operation.
- All measures used to nullify or reduce the effectiveness of attack by hostile aircraft or missiles after they are airborne.

Tactical fire support includes artillery, mortar, and other nonline-of-sight army fires, naval gunfire, CAS, and EW while AD includes all weapons systems with potential to engage aerial targets.

#### FIRE SUPPORT

Synchronization is key to effective tactical fire support in a multinational environment. The MFC must organize his staff to ensure the fire support element can synchronize the fire support capabilities of all friendly forces. This serves a twofold purpose. First, it provides the capability of applying the most effective fire support to a given target in the most timely fashion. Second, bringing multinational fire support under centralized control as much as possible provides another safeguard against fratricide.

The multinational commander must ensure that the fire support annex to his OPLAN provides detailed information regarding the means by which the multinational fire support element operates. As the focal point for fire support, this element must have the means of controlling all fire support at its disposal. Usually, this requires representation from all member nations. It would be the responsibility of these representatives to coordinate fire support matters between the multinational headquarters and their respective army fire support activities.

If time permits, the MFC should direct the establishment of an SOP for fire support. Simplicity should be the foundation of this document. If establishment of a formal SOP is not practical, the fire support annex to the OPLAN must be comprehensive enough to provide detailed information as to how this aspect of the operation comes together.

#### AIR DEFENSE

Multinational AD assets are integrated and managed at the operational level to achieve a balanced mix of AD forces available to the operational-level commander. The operational-level commander establishes both positive and procedural measures to minimize mutual engagement interference and establishes readily identifiable means to protect friendly aircraft. Additionally, the operational-level commander provides the tactical-level commanders guidance on priorities of effort to provide maximum protection and use of the tactical commander's AD assets.

The tactical-level commander must focus his AD assets on protecting his formation, in line with the mission. There are no specific AD concepts for multinational operations, yet there are actions that must be emphasized between tactical-level multinational AD forces.

Perhaps the single most important action is the additional coordination required between allied AD forces in order to better understand one another's capabilities and procedures. This may include—

- · Establishing communications nodes.
- Sharing tactical and intelligence information.
- Developing/confirming early warning procedures for respective sectors.
- Establishing liaison teams for the coalition's AD units.
- Coordinating other actions that promote a better understanding of the multinational commander's intent.

Development of cross-service capabilities is necessary.

Airspace  $C^2$  considerations are critical aspects of the AD battlefield operating system. Commercial aircraft, helicopters, and air force, navy, and marine corps aircraft use the same airspace.

Air and missile defense at the tactical level entails all measures designed to nullify or reduce the effectiveness of attack by hostile aircraft or missiles. It includes all weapons systems with the potential to engage aerial targets.

The tactical-level commander focuses on the lethal engagement of air and missile targets, conducts nonlethal engagement of air and missile targets, and denies the enemy use of airspace. The tactical commander has ADA, joint, and multinational active defense systems to accomplish these tasks. Tactical-level commanders ensure that AD operations are fully integrated into the land component commander's plan of operations for a coordinated effort of providing force and asset protection. The prioritization of assets for protection is critical to successful accomplishment of AD operations.

During multinational AD operations, many considerations must be addressed. Among them are weapons systems types and capabilities, logistics

requirements (arming, fueling, fixing, moving, and supporting soldiers), interoperability connectivity, communications, and leadership. All levels of command are responsible for ensuring that TMD/AD operations are efficiently and effectively implemented. Specific consideration must be given to integrating similar or like systems having distinctly different systems capabilities. To identify shortcomings and prevent deficiencies, training and rehearsals must be integrated into daily operations, since variations in systems can hinder effective operations. To better understand each nation's capabilities and procedures, the establishment of communication nodes, the sharing of tactical and intelligence information, the development of alert and early warning systems, and the provision of liaison teams (linguists) promote unity of effort.

Airspace  $C^2$  is critical to successful air and missile defense operations since both commercial and military aircraft may operate within the protected airspace. FMs 100-103, -1, and -2 provide detailed information on Army airspace  $C^2$ .

#### HISTORICAL EXAMPLE

On 12 January 1991, in response to a growing tactical ballistic missile (TBM) threat in the Persian Gulf, the Secretary of Defense authorized the deployment of two USAREUR Patriot batteries to Turkey to provide TBM defense for Incirlik Air Base. By 22 January, six of the eight launchers were in place and operational with 43 missiles on hand. The United States and Israeli political authorities agreed to deploy Patriot units to counter TBM threats (in the form of Soviet-built SCUD missiles) to Israel. Shortly after the war began, Iraq attacked Tel Aviv and Haifa, Israel, with an extended range variant of the SCUD B missile. A direct Israeli military response to these attacks might have weakened the commitment of coalition Arab members to Operation Desert Storm. Task Force Patriot Defender, created from the 32d Air Defense Command (USAREUR), deployed to Israel to provide antitactical ballistic missile defense of priority Israeli assets and to provide training and maintenance support for the two newly formed Task Force Patriot batteries. Patriot units from the 32d Air Defense Command were ordered to deploy. The task force was operational, and ready to fire. A second deployment of two more batteries to Israel began on 23 January and was completed and operational by 26 January.

DOD Final Report to Congress

Conduct of the Persian Gulf War, April 1992

## COMBAT SERVICE SUPPORT

Tactical CSS sustains the tactical commander's ability to fight battles and engagements by providing the right support at the right time and place to units in the combat zone. The focus at the tactical level is on manning and arming tactical units, fixing and fueling their equipment, and moving and sustaining soldiers and their systems. The multinational commander must thoroughly integrate CSS with the concept of operations during planning.

The levels of CSS compatibility in multinational army CSS have a great influence on the functions and actions of commanders. As a result, planning staffs must evaluate the level of compatibility and commonality between participating nations and, where situations permit, agree on—

- The nations responsible for providing support functions for the MNF.
- The task organization of the CSS units to support the MNF.
- The procedures and methods to provide the support.

Bilateral and multilateral agreements must clearly define command and support relationships, national responsibilities, and multinational responsibilities. The multinational CSS coordinator must be aware of all agreements between and among participating nations to integrate support and adapt it to the combatant commander's intent.

Multinational compatibility, commonality, and cooperation must be reflected throughout the multinational CSS command with the objective of blending manpower, equipment, and resources into the most effective combat force possible. However, many multinational sustainment concerns will be encountered across the full range of CSS—from providing soldiers with food, water, equipment, and clothing (resources and assets); to providing health care, ammunition, fuel, transportation, and movement operations; and finally, to performing maintenance, recovery, and repair parts management (functional support areas).

At the MNF headquarters, the support focus should be on—

- Measuring the requirements for executing the campaign plan.
- Providing advance estimates of these requirements to national units.
- Ensuring that proper controls are in place to deconflict and permit movement and processing of combat power to units.

Actual execution of tactical support to MNF members should be decentralized.

An important aspect of operational sustainment is planning for future operations. Commanders must be aware of the current and projected requirements of their own force and projected logistical requirements of various members of the MNF they may have to support.

At the respective nations' tactical level, multinational CSS C² would be executed through and by a national CSS unit. The CSS unit should be a flexible organization able to deploy units and materiel throughout the operating area. If the scale of the operation or the length of the LOC dictates, the CSS unit should be able to split into two parts—a rear support unit (RSU) and a forward support unit (FSU). The RSU would execute control of national resources and assets in the rear area and in proximity of the POD. In the rear, depending on the situation, the RSU may collocate with the CSS unit. Also, the FSU would establish a position close to the operating area with more mobile units. In addition, the FSU would provide necessary logistics support to forward logistics units and forces. The FSU may receive selective logistics support from a lead nation tasked to provide specific logistics support in the operating area of the FSU.

#### HISTORICAL EXAMPLE

On 17 January 1991, the 6th Light Armor Division (French) was assigned under TACON of the XVIII Airborne Corps. It replaced the heavier 1st US Cavalry Division within the XVIII Airborne Corps and provided a faster, less logistically dependent force with which the corps could execute its offensive mission.

The French arrived on the west coast of Saudi Arabia at Yanbu and had been operating independently until 17 January with a national LOC back through that test coast city to France. The XVIII Airborne Corps LOC ran east to Ad Dammam. With different in-place and effective supply systems, planners decided to collocate logistical units but not to further integrate the supply process. The US provided essentially only water and fuel for French forces during the operation. Class I (water) support was provided through a supply point system until G-Day. The corps brought water forward to the logistical base in the tactical assembly areas. French vehicles picked up the water and carried it forward to their division support area. Once the attack began, corps provided water support directly to the division support area for the French, thus releasing the French's organic transport for internal distribution.

Class III bulk was also a supply point system prior to G-Day and continued as such throughout the conflict. The French division had a fuel system supply point with collapsible bags at their division support area. This allowed them to build up a supply of fuel for several days of operations. Fuel tankers from corps and higher provided fuel to the corps fuel supply point, and division assets carried it forward to their units.

#### CIVIL AFFAIRS

CAs are the activities of a commander that establish, maintain, influence, or exploit relations between military forces and civil authorities, both governmental and nongovernmental, and the civilian population in a friendly, neutral, or hostile AO to facilitate military operations and consolidate operational objectives. CA may include performance by military forces of activities and functions normally the responsibility of the local government. These activities may occur before, during, or after other military actions. They may also occur, if directed, in the absence of other military operations.

Prior to hostilities and in peacetime, CA units may help a nation create or improve its own infrastructure, thereby precluding grievances from flaring into war. During hostilities, the primary role of CA is to ensure that civilians do not interfere with operations. The secondary role is to protect and care for civilians in a combat zone and assist the commander in fulfilling his legal and moral obligations to the civilian population.

## **TRANSPORTATION**

By synchronizing the employment of water, rail, road, and air transportation assets available to the MNF, the effectiveness and efficiency of moving supplies, equipment, personnel, and EPW are enhanced. In most multinational operations, a centralized authority should be established. This authority would allocate space, set the order of deployment, and deconflict requirements to support the national elements of the multinational

formations. Several methods can be used to organize and manage the MNF's transportation requirements. They include—

- Establishing a multinational movement control agency or similar organization.
- Consolidating general support transportation assets under the control of one nation.
- Operating sea/air terminals by a single nation, if appropriate.

#### **SUPPLY**

Significant economy and savings of the MNF's POL resources and efforts can be achieved by consolidating bulk fuels and refining storage and distribution requirements. The result is an increase in tactical flexibility and maximum use of fuel transport equipment and storage capabilities. Planners should consider forming a multinational petroleum office, similar to the joint petroleum office, as soon as possible. To reduce redundancy, nations should agree to have one nation operate storage facilities and pool transport assets under another nation's control. Planners must ensure that couplings are interoperable between national assets.

From small arms ammunition through artillery shells and charges, from different storage and transportation requirements, to national policies and procedures for redistribution, the ammunition requirements of an MNF are tremendous. Planners can assume little in this area. For example, different nations use different powder for their 155mm artillery shells, which produces different firing tables. Various national storage, transportation, surveillance, materials handling, and issue and receipt policies and procedures require significant investigation and revision for effective use during a multinational operation. Planners must develop a matrix of weapons systems that identifies compatibility of weapons and interchangeability of munitions to support the force. NATO's STANAG 2928<sup>1</sup> provides a baseline to accomplish this task. Where feasible, consideration should be given to establishing collocated ammunition storage facilities. The above actions reduce redundancy and economize support assets.

#### PERSONNEL SERVICES

Due to the nature of PSS, multinational PSS assets should be collocated. However, individual national application of PSS remains a national responsibility. This allows for ease of coordination between the national elements of the MNF even though personnel functions are not amenable to consolidation.

Finance operations and resource management focus on supporting local procurement efforts and on funding and tracking operations costs. Finance elements help access HN (private sector) and other support by paying for contracts and by providing cash to paying agents to make local purchases for immediate needs of the force. Finance personnel also provide military pay support and provide limited support to other services, such as funds for

<sup>&</sup>lt;sup>1</sup> Allied Operational Publication 6 (G), Land Forces Ammunition Interchangeability Catalogue in Wartime, updated annually.

paying agents and cashing checks as agreed upon and cashing checks and exchanging currency for individuals. Resource managers focus on obtaining obligation and expenditure authority and on tracking the costs of the operation. Finance elements provide essential input into the accounting systems to support cost capturing. Accurate, detailed costs are needed for reporting to Congress and for government dealings with multinational partners to determine how costs have been or should be apportioned.

#### FIELD SERVICES

Mortuary affairs, airdrop, water production and distribution, and laundry and shower services lend themselves to central planning and distribution. Rations have the potential for some degree of mutual support as long as nutritional and caloric requirements are met and significant national taste and/or religious concerns do not exist. If taste and/or religion are major factors, one nation could provide the basic ration with affected nations providing supplements to meet national requirements.

#### COMBAT HEALTH SUPPORT

While most MNFs deploy with some form of combat health support, wide disparities always exist in the quality and quantity of medical services provided by each of the participants. The consolidation of multinational medical assets should be evaluated to maximize availability and effectiveness of combat health support. Coordination between multinational medical units is essential for effective MEDEVAC support, specialized medical services, and hospitalization of force members. The US, as with most other nations, retains control over medical care to its forces, except in life-threatening situations. When an MNF member receives emergency treatment from another nation, the patient is first stabilized. Then, he is transferred via MEDEVAC to a national medical treatment facility in or near the operating area. Depending on the mission, combat health support requirements may differ. Combat health resource requirements may include trauma treatment for casualties, preventive medicine for displaced civilians, or veterinary support for local farmers

#### HISTORICAL EXAMPLE

Collocated medical facilities allowed US MEDEVAC helicopters to provide lift to both US and French evacuees to a single point for both hospitals. A centralized triage point provided for segregation of injuries as evacuees were removed from the helicopters with both US and French medical personnel on site.

With both US VII Corps and XVIII Airborne Corps moving to tactical assembly areas simultaneously, US and Saudi heavy equipment transporter (HET) assets were overtaxed. The French offered the use of 42 of their HETs. Commanded by a French officer, the French transports reported to the XVIII Airborne Corps Transportation Control Center (TCC) at An Nuayriyah for direction. They then transported the US armor to the corps tactical assembly areas in the vicinity of Rahfa and returned to the TCC for their next mission. This support continued until the move of the corps was complete.

#### MAINTENANCE OPERATIONS

The greatest challenge for logistics planners, without benefit of common equipment, is the capability to achieve mutual support in the area of maintenance operations. Again, a matrix of equipment must be developed to determine where mutual support can be provided. Logistics planners should also consider collocating maintenance organizations, sharing common test equipment, and consolidating or integrating recovery and evacuation assets.

#### HOST NATION SUPPORT

Planners should consider centralizing HNS expertise (legal, financial, procurement, contracting, and administrative). This would ensure the force's total requirements are known, prevent competition among partners, and allocate support based on command priorities that best support the operational objectives. CA units have this type of expertise available. The MNF's total logistics requirements are known to prevent competition among partners. The allocation of this support is based on command priorities that best support the operational objectives.

In the area of HNS, the multinational commander must know the amount and type of HN or counterpart logistical support available to him in his AO. While some operating areas have well-established HN agreements, the multinational commander must plan and prepare to coordinate required support in theaters where established agreements are not present.

Examples of support that can be provided by the HN include—

- Supply (to a limited degree).
- · Maintenance (to a limited degree).
- · Recovery and evacuation.
- Transportation.
- Hospitalization and MEDEVAC.
- · Construction.

The multinational commander should plan and pursue any form of this support that the HN can provide before or immediately upon arrival in his operating area.

## COMMAND AND CONTROL

Tactical  $C^2$  in a multinational environment is the exercise of authority and direction by a properly designated multinational commander over assigned forces to accomplish the mission. Multinational  $C^2$  activities are performed through an arrangement of personnel, equipment, facilities, and procedures to plan, direct, coordinate, and control forces and operations.

The most obvious  $C^2$  considerations in a tactical multinational environment are differences among partners in TTP and equipment with procedural differences causing the most friction. The multinational commander must recognize, however, that the key purpose of  $C^2$  remains unchanged. That purpose is the process of generating and applying combat power decisively.

US  $C^2$  procedures often differ greatly from those employed by other nations. Many of our multinational partners categorize our C<sup>2</sup> system as decentralized (i.e., orders emanate from the bottom), while they feel that their own  $C^2$ procedures are centralized (i.e., orders emanate from the top). Additionally, they see US procedures being too lengthy and indirect, while they view their own systems as shorter and more direct. The US use of multiple fragmentary orders (FRAGOs), from the basic operations order (OPORD), is a potential source of confusion that US staffs must consider. Also, the size of US headquarters elements tends to overshadow their counterparts and leads to confusion over where they can best tie into the US C<sup>2</sup> apparatus. Some common techniques, such as walk-through rehearsals,2 are extremely effective in ensuring common understanding among multinational partners. They are the easiest medium to ensure that all players understand the commander's intent and are properly synchronized in all phases of an operation. Walk-through rehearsals provide an excellent opportunity for the various national commanders to ensure that national representatives fully understand capabilities of other nations. For example, discussion of a defensive plan would bring out different intelligence sources, such as sound ranging, differing ground reconnaissance assets, and artillery ranging, that planners may have overlooked.

Another  $C^2$  consideration not fully appreciated or understood is selection of a  $C^2$  language. English is not automatically the  $C^2$  language. Mistakes or misunderstandings happen during the translation of the  $C^2$  language into an ally's native tongue. Language problems are solvable—but not quickly, and the process requires tremendous dedication of resources.

As in unilateral operations, METT-T impact upon the C<sup>2</sup> architecture of an MNF. In the multinational environment, however, the variances in TTP and equipment provide additional considerations that must be factored in. If armies have little or no previous experience operating with one another, the multinational commander must devise a command and staff arrangement that capitalizes on the strengths of multinational armies. The actual command structure may be imposed on the commander by higher military or political authority. However, the commander must retain the flexibility to adjust the architecture to ensure harmony and unity of effort. If control mechanisms are so dissimilar as to preclude interoperability, the commander must create an operations center comprised of personnel and equipment that enables him to control all forces from at least one central location. One implied requirement here is requisite linguistic ability for personnel assigned to the operations staff. Another given is that liaison teams and personnel must be employed by all partners to augment the C<sup>2</sup> effort. Planners must prepare for rapid changes in mission that alter the type and priority of support needed. Interoperability of communications and a standardized report system are critical to the success of the operation.

As for command relationships and human factors (political, cultural, and economic issues and the impact of personalities on multinational operations), the same considerations discussed at the operational level apply at the

<sup>&</sup>lt;sup>2</sup> Sticker drills have proven very effective in communicating the commander's intent within an MNF.

tactical level. Early agreement upon  $\mathrm{C}^2$  issues facilitates agreement upon other tactical-level functions.

## MOBILITY AND SURVIVABILITY

Tactical mobility and survivability provide a force freedom of movement relative to the enemy, while allowing the force the ability to fulfill its primary mission. Tactical mobility and survivability include those protection measures the force takes to remain viable and functional, despite the effects of enemy weapon systems and natural occurrences. Consideration of functions such as deception, OPSEC, security, and NBC activities can help avoid enemy detection and reduce the effects of enemy weapons.

Commanders must recognize the distinction between the function of *maneuver* and the function of *mobility and survivability*. Specifically, maneuver functions pertain to movement for positional advantages. Mobility and survivability functions pertain to enhancing friendly movement or protecting friendly forces from the effects of enemy weapon systems and natural occurrences.

Of significance to the multinational commander is his knowledge of the capabilities (strengths and weaknesses), in terms of mobility and survivability, of the MNFs under his control. Again, differences in TTP become principal considerations with regard to tactical mobility and survivability. The assessment and inclusion of mobility and survivability functions in tactical plans are standard practice for most nations in unilateral operations; yet, when considered from a multinational perspective, these same functions require commonality of procedures to be effectively planned and executed.

#### MOBILITY FUNCTIONS

TTP and tactical plans must provide freedom of movement for MNF on the battlefield without delays caused by terrain or obstacles (to include dislocated civilians). Mobility functions that require special multinational considerations include—

- Facilitating movement.
- · Reducing obstacles.
- · Employing tactical bridges.
- · Upgrading LOC capabilities.
- · Removing and disposing of dislocated civilians.

These functions are tailored to enable an MNF to maintain its mobility and ability to fulfill its primary mission while delaying, channeling, or stopping offensive movement by the enemy. An example of these functions is found in engineer support of an MNF, which impacts significantly on MNF mobility. Engineer task-organization decisions require an assessment of both US engineer capabilities and other nations' engineer capabilities. For example, an allied force may have a better breaching capability but lack survivability equipment. The multinational commander may task-organize to use these strengths. Commanders need to address interoperability, logistics, language,

and doctrinal concerns. Early in the planning phase, commanders should establish procedures to address these issues. Also, commanders should determine the  $C^2$  system that most effectively enhances the mobility, countermobility, and survivability skills of engineer units. Reporting procedures, national interest, intent, and assessment of unique engineering tasks or problem areas need to be clarified among allies.

The multinational commander may clarify problem areas by directing an indepth engineer estimate be performed on the mission and capabilities of the MNF. The estimate should determine—

- The engineer capabilities each ally provides.
- The engineer requirements of each force in the MNF.
- · The available HN assets and capabilities.
- The task-organization that makes the best use of the strengths of each allied engineer force.

#### SURVIVABILITY FUNCTIONS

The ultimate objective of all commanders is to accomplish the mission with minimal loss of personnel, equipment, and supplies. Commonality of key survivability functions is of particular concern to the multinational commander simply because failure to address and establish common procedures for MNF could result in mission failure. Survivability functions affect every aspect of tactical plans. Key survivability functions that the multinational commander must consider are—

- Battlefield hazard protection used to protect friendly forces on the battlefield by reducing or avoiding the effects of enemy weapons through the use of armor, NBC protection, fighting positions, overhead cover, warning devices, and so forth.
- Actions such as identification, friend or foe (IFF) to prevent fratricide and friendly fire damage to MNFs and other marking or procedures to positively identify friendly forces.
- OPSEC procedures such as signal, transmission, information and communications security, concealment techniques, camouflage, noise and light discipline, counterreconnaissance, and physical security controls are used to deny the enemy information about friendly capabilities and intentions by identifying, controlling, and protecting indicators associated with planning and conducting multinational operations.
- Deception in support of multinational tactical operations that mask the real objectives and delay effective enemy reaction by misleading the enemy about friendly intentions, capabilities, objectives, and the locations of vulnerable units and facilities. An effective deception program employs both electromagnetic and physical means. The multinational commander should be prepared to employ physical deception tactics such as demonstrations, feints, ruses, displays, and deception smoke screens. All of these are intended to prevent the enemy from learning the intentions of friendly forces.

#### HISTORICAL EXAMPLE

XVIII Airborne Corps began addressing fratricide reduction measures immediately upon assuming tactical control of the 6th Light Armor Division (French) during Operation Desert Shield. All Arab coalition forces screening to the north of the corps defense positions had a mix of Soviet, European, and US equipment, much of which was identical to Irag's.

In addition to identification panels, inverted "V," and light markings addressed in the SOP, the corps and the 6th French recommended the inclusion of three white "invasion" stripes on French aircraft to clearly identify them as friendly. Also, the 6th French established a schedule of visiting US combat units with their ground and air systems to help visually familiarize US gunners and vehicle commanders with French equipment. The success of these efforts was confirmed by the 101st Air Assault Division's officers and NCOs who had French aircraft or vehicles on their flanks but did not engage the French due to the system's markings and soldier familiarity with French systems.

To reduce the possibility of fratricide, the hard surface road (MSR TEXAS) was used as the boundary between US and French ground units. Additionally, the 2d Brigade, 82d Airborne Division, and its adjacent French units, the 3d Rima and the 4th Dragoons, conducted detailed coordination on their respective maneuver plans following the map exercises. They also exchanged bilingual liaison teams at the battalion level to accelerate cross-battalion coordination in combat. Also, visual contact was maintained between adjacent French and US units throughout the operation, often with French and US vehicles or soldiers only 50 meters apart.